

Patent Claims:

1 1. A spinneret for spinning thermoplastics with a
 2 central polymer melt inlet passage, a filer arrangement (2)
 3 comprised of a plurality of filter disks of different filter
 4 fineness which are fixedly bonded together by cold pressing, a
 5 spinneret plate (3) and a housing (1), which closely surrounds and
 6 receives the filter arrangement (2) and the spinneret plate (3)
 7 characterized in that said filter arrangement (2) has no sealing
 8 enclosure and is comprised of a material with a higher thermal
 9 expansion coefficient than that of the material from which the
 10 housing (1) surrounding it is fabricated.

1 2. A spinneret for spinning of thermoplastics having a
 2 central polymer melt inlet passage, a filter arrangement (2)
 3 comprised of one or more filter disks of different filter fineness
 4 and optional type, a spinneret plate (3) and a housing (1)
 5 surrounding and receiving the filter arrangement (2) and the
 6 spinneret plate (3) characterized in that the spinneret plate (3)
 7 is comprised of a material with a higher thermal expansion
 8 coefficient than that of the material from which the housing (1)
 9 surrounding it is fabricated.

1 3. A spinneret for spinning of thermoplastics having a
 2 central polymer inlet passage, a filer arrangement (2) comprised of

3 a plurality of filter disks of different filter fineness which are
4 fixedly bonded together by cold pressing with one another, and a
5 spinneret plate (3) and a housing (1) closely surrounding and
6 receiving the filter arrangement (2) and the spinneret plate,
7 characterized in that the said filter arrangement (2) has no
8 sealing enclosure and the filter arrangement (2) and the spinneret
9 plate (3) are comprised of materials with a higher thermal
10 expansion coefficient than the material from which the housing (1)
11 surrounding them is fabricated.

4. The spinneret according to one of claims 1 to 3
characterized in that the spinneret plate (3) and/or the filter
arrangement (2) are composed of austenitic steel like for example
Nos. 1.4301, 1.4541, 1.4580 or a material with a similarly high
thermal expansion coefficient and that the housing (1) surrounding
them is fabricated from a material with a lower coefficient of
thermal expansion like, for example No. 1.4057 or a similar
chromium steel or refractory material.

5. The spinneret according to one of claims 1 to 4
characterized in that the dimensioning is so selected that the fit
between the outer diameter of the spinneret plate (3) and/or the
filter arrangement (2) on the one hand and the bore receiving it in
the surrounding housing (1) on the other hand provides a slight
play fit at room temperature which is transformed at operating

7 temperatures based upon the different expansions of the parts, into
8 a self-sealing radial press fit.

1 6. The spinneret according to one of claims 2 to 5
2 characterized in that the spinneret plate (3) is comprised of a
3 material with a higher thermal expansion coefficient than the
4 material of the housing (1) surrounding it and that the spinneret
5 plate (3) has in its lower half additionally a thread provided
6 which is directly screwed into the housing (1) whereby the thread
7 and the stop of the spinneret plate (3) in the housing (1) are so
8 formed that the spinning orifice pattern always has the same
9 orientation so that the correct blast on the filaments as they are
10 spun is ensured by the screwing of the spinneret plate (3) to its
11 stop.

1 7. The spinneret according to one of claims 1 to 6
2 characterized in that the housing (1) has at its lower end a
3 projecting collar which has at least three grooves for receiving a
4 tool for screwing the spinning system in and out and in that the
5 spinneret plate (3) is thereby protected against detrimental
6 contact during handling.